UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/586,913	10/23/2006	Eduardo Luis Salva Calcagno	P70496US0	3170

136   7590   12/09/2009
JACOBSON HOLMAN PLLC
400 SEVENTH STREET N.W.
SUITE 600
WASHINGTON, DC 20004

EXAMINER
PATEL, JAYESH A

ART UNIT	PAPER NUMBER
2624	

MAIL DATE	DELIVERY MODE
12/09/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

PTOL-90A (Rev. 04/07)

	Application No.	Applicant(s)
Office Action Summary	10/586,913	SALVA CALCAGNO, EDUARDO LUIS
	Examiner	Art Unit	
	JAYESH PATEL	2624	

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *07/24/2006*.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-19* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-19* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *24 July 2006* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☒ All   b)☐ Some * c)☐ None of:

       1.☒ Certified copies of the priority documents have been received.

       2.☐ Certified copies of the priority documents have been received in Application No. _____.

       3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date *12/07/2006*.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application

6)☐ Other: _____ .

DETAILED ACTION

Claim Objections

Claim 1 is objected to because of the following informalities: Claim 1 has

preamble starting "Person identification system" followed by steps in the body

which makes it a method or process or procedure. The preamble should

therefore read "Person identification procedure". Appropriate correction is

required.

Claim 6 " a fingerprint" at line 3 should read "the fingerprint". Appropriate

correction is required.

Claim 8 " a fingerprint" at line 2 should read "the fingerprint". Appropriate

correction is required.

Claim 17 " a fingerprint" at line 4 should read "the fingerprint". Appropriate

correction is required.

Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show

every feature of the invention specified in the claims. Therefore, the series of the

devices must be shown or the feature(s) canceled from the claim(s). No new

matter should be entered. The original drawings filed do not show the devices or

the apparatus interrelated.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are

required in reply to the Office action to avoid abandonment of the application.

Any amended replacement drawing sheet should include all of the figures

appearing on the immediate prior version of the sheet, even if only one figure is

being amended. The figure or figure number of an amended drawing should not

be labeled as "amended." If a drawing figure is to be canceled, the appropriate

figure must be removed from the replacement sheet, and where necessary, the

remaining figures must be renumbered and appropriate changes made to the

brief description of the several views of the drawings for consistency. Additional

replacement sheets may be necessary to show the renumbering of the remaining

figures. Each drawing sheet submitted after the filing date of an application must

be labeled in the top margin as either "Replacement Sheet" or "New Sheet"

pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner,

the applicant will be notified and informed of any required corrective action in the

next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly
claiming the subject matter which the applicant regards as his invention.

Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite

for failing to particularly point out and distinctly claim the subject matter which

applicant regards as the invention. Claim 1 has a limitation "using conventional

methods" at lines 13-14 which renders the claim indefinite. It is unclear as to which conventional method out of so many methods falls in the metes and bound of the claim. Also it would be appropriate to call any particular method as conventional. Applicant is required to limit the claim by claiming a particular method (name) as supported in the specification. Claims 2-19 depends directly or indirectly from claim 1 therefore they are rejected.

Regarding claim 2 the limitation "any intrusive or non-intrusive method" renders the claim indefinite. It is unclear as to what specific method is claimed. See the above explanation for the indefiniteness.

Regarding claim 6, the step of inputting the genetic code of the person at lines 12-13 is indefinite. Claim 6 depends from claim 1 and claim 1 does not recite the step of inputting and moreover does not recite the limitation of DNA or genetic code. Therefore it is unclear as to how the step of inputting is possible in the dependent claim if it is not present in the independent claim. Also claim 6 recites at lines 1-2 "prior to inputting the information in to the database" is indefinite because there is no inputting step present in claim 1.

Claim 1 recites the limitation "the digital image" in line 6. There is insufficient antecedent basis for this limitation in the claim.

Claim 6 recites the limitation "the database" in line 2. There is insufficient

antecedent basis for this limitation in the claim.

Claim 6 recites the limitation "the personal data" in line 3. There is insufficient

antecedent basis for this limitation in the claim.

Claim 19 recites the limitation "the database engine" in line 1. There is

insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set
forth in section 102 of this title, if the differences between the subject matter sought to be patented and
the prior art are such that the subject matter as a whole would have been obvious at the time the
invention was made to a person having ordinary skill in the art to which said subject matter pertains.
Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-6 and 8-17 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Levison et al. (US 5465303) hereafter Levison in view of Miller et al. (US

20030025423) hereafter Miller as best understood by the examiner.

1. Regarding claim 1, Levison discloses Person identification system **(Fig 1)**

characterized by converting fingerprints and genetic codes into barcodes,

including these steps:

obtaining a fingerprint by a digital device **(Figs 3A-6D shows the images of the fingerprints captured for classifying, Col 19 lines 54-55 which discloses the fingerprint input system)**;

plotting the digital image of a print onto a predetermined alphanumeric two-dimensional grid or stencil in segments with the measurements identified by letters and/or numbers **(Col 11 table B, Col 12 lines 1-25 shows the alphanumeric codes assigned to the fingerprints categories)**;

classifying the print into one of the possible existing groups **(Figs 3A-3d are the four primary categories used in primary classification at Col 11 lines 33-67, Fig 2C shows the classification of the fingerprints)**;

subclassifying the print according to the classification to which it belongs **(Fig 2c shows the sub classification and col 12 lines 46-54 shows the codes assigned in the subclassification)**;

determining the characteristic points of the fingerprint and coding in the alphanumeric information **(the characteristics points of the fingerprints are assigned the codes as seen in Col 13 lines 1-38)**. Levison discloses the classification and the subclassification of the fingerprints as seen above, however is silent and does not recite in exact claim language converting the alphanumeric code obtained into barcodes using conventional methods.

Miller discloses at **para0018** where the biometric representation such as fingerprints and DNA coding are coded in the **form of barcodes** meeting the limitation of converting the alphanumeric codes into barcodes. Miller discloses

that the biometric representation embedded offers a layer of security (advantage)

while checking against the bearer at **para 0018**. Miller and Levison are from the

same field of endeavor (identification of the person having biometric

representation) and are analogous art (image processing), therefore it would be

obvious for one of ordinary skill in the art at the time the invention was made to

have used the teachings of Miller in the system and method of Levison for the

above reasons.

2. Regarding claim 2, Levison and Miller discloses the person identification

procedure according to claim 1. Miller further discloses in **para 0018** where the

DNA code is encoded in the form of 2-D barcode meeting the limitation of claim

2.

3. Regarding claim 3, Levison and Miller disclose the person identification

procedure according to claim 1. Miller discloses further including the step of

linking the barcode obtained to the rest of the person's information **(para 0018**

and as seen in Fig 1 where the Id document has the driver's licence,

passport and all of the above includes the address and photograph

(personal information) with the encoded barcode) meeting the claim

limitation.

4. Regarding claim 4, Levison and Miller disclose the person identification

procedure according to claim 1. Levison discloses at Col 12 lines 15-16 and 25-26 where the alphanumeric code is multidimensional meeting the limitation of three dimensional alphanumeric code.

5. Regarding claim 5, Levison and Miller disclose the person identification procedure according to claim 1. Levison disclose further wherein the step for determining the characteristic points of the fingerprint and coding them into alphanumeric information is done taking into consideration the specific square of the grid the characteristic point is found **(Col 15 30-48 where the feature is determined via the boundary box which has four corners meeting the limitation of the square)**.

6. Regarding claim 6 as best understood by the examiner, Levison and Miller disclose the limitations of claim 1. Levison discloses the matcher searches the database at Col 8 lines 45-50 and the template creation subsystem as in Fig 1 and at Col 14 lines 40-60 would meet the limitation of claim 6 in the inputting of the biometric information (DNA or fingerprint) in to the database for matching (checking).

7. Regarding claim 8 see the explanation of claim 1. Levison discloses the classifying and storing the fingerprints in the database and the system uses the matcher to search the database for the person's fingerprints **(Col 8 lines 30-52)**

meets the limitation of claim 8.

9. Regarding claim 9 see the explanation of claim 8. also it would be within one of ordinary skill in the art to apply the teachings of identification matching via searching the database to any (biometric information, fingerprints taught by Levison and DNA coding and fingerprints taught by Miller) which would include the DNA or genetic code.

9. Regarding claim 10, Levison and Miller disclose the person identification procedure, according to claim 6, wherein the fingerprint that is captured digitally is not taken as a whole, but rather is plotted on a two-dimensional grid, and one alphanumeric chain is obtained for each square.

10. Regarding claim 11, Levison and Miller disclose the person identification procedure according to claim 6. Levison discloses at Col 12 lines 15-16 and 25-26 where the alphanumeric code is multidimensional meeting the limitation of three dimensional alphanumeric code.

11. Regarding claim 12, Levison and Miller disclose the person identification procedure according to claim 1. Levison discloses **Figs 9a and 9c** height > 2(Width) meets the limitation of width and height of rows and columns.

12. Regarding claim 13 see the explanation of claim 1 and 6. Levison discloses the **flowchart (software) in Figs 9a-9c** for assigning the categories and subcategories with the codes.

13. Regarding claim 14 see the explanation of claims 1 and 6.

14. Regarding claim 15, Levison and Miller disclose the person identification procedure, according to claim 6. Levison discloses in fig 11 wherein the search the software performs is done by combining just certain characteristic points of the alphanumeric chain in specific squares **(Fig 11 comparing the slope of the lines left and right of the central feature meets the limitation of combining the certain points)**.

15. Regarding claim 16 see the limitation of claim 1 and 6.

16. Regarding claim 17, Levison and Miller disclose the person identification procedure according to claim 1. Levison discloses further wherein prior to the classification and subclassification steps, steps involving segmenting the image obtained, dividing the image containing several fingerprints into several separate images each containing a fingerprint are added, and each of them is worked individually according to the following steps: segmenting each image eliminating the pixels that do not pertain to the print; improving the image by eliminating

noise; performing a quality analysis of the print **(Col 14 lines 38-39)**, and an

determined quality index is obtained, if it is the right one, the image is processed

as follows: searching on the core of the print; binarizing the image where black

pixels represent ridges and white ones the valleys **(Col 15 lines 46-50)**;

calculating the local placement of ridges and valleys **(Col 15 lines 63-64 where**

the valley adjacent to the central feature is colored); calculating the general

orientation of the print **(Col 15 lines 41-42)**; configuring the grid and its central

point is inserted in the center of the image; numbering and lettering the grid and

each square is assigned a character graphically displaying the image resulting

from inserting the grid onto the fingerprint **(Fig 2c shows the sub classification**

and col 12 lines 46-54 shows the codes assigned in the subclassification).

Claims 18-19 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Levison in view of Miller and in further view of Nakazawa et al. (US

20030123710) hereafter Nakazawa as best understood by the examiner.

17. Regarding claim 18, Levison and Miller discloses the device used in the

procedure of claim 1. Levison discloses the system in fig 1 for inputting,

classification and matching the fingerprints. Miller discloses the 2-D barcode

representation of the biometric information (fingerprint or DNA), capturing the

image and printing at **Fig 1 and Para 0018**. Levison and Miller are silent and do

not recite in exact claim language including a series of devices or apparatus that are interrelated.

Nakazawa discloses interrelated devices **(Fig 3)**, a digital medium to capture images **(Fig 3 CMOS sensor sensor 12 captures images)**, a computer containing the information system **(Fig 3 elements 14 and 32 which is a CPU)**, a database **(Fig 3 image memory, Para 0006 discloses the fingerprint database)**, a barcode laser reader **(para 0028 discloses barcode reader)**, and a printer **(para 0029 which discloses the printed barcode meets the limitation of a printer)**. Nakazawa discloses the authentication system which is compact and unified as one unit (multiple information inputting devices are unified) at **para 0012**. Nakazawa, Levison and Miller are from the same field of endeavor and are analogous art, therefore it would be obvious for one of ordinary skill in the art at the time the invention was made to have used the teachings of Nakazawa **(compact unit)** in the system of Levison and Miller for the above reasons.

18. Regarding claim 19, Levison, Miller and Nakazawa disclose the device according to claim 18. Nakazawa disclose wherein the database engine can be in a server **(Para 0066 discloses computer 41 connected to an outside database through the communication network)** meeting the limitation of a server.

19. Regarding claim 7, Levison and Miller disclose the person identification procedure according to claims 1. Levison disclose the classification and subclassification of the fingerprints and assigning the alphanumeric codes as seen in claim 1. Miller discloses at **para0018** where the biometric representation such as fingerprints and DNA coding are coded in the **form of barcodes** meeting the limitation of converting the alphanumeric codes into barcodes and Nakazawa discloses the compact system which authenticates the multi-information by decoding the two dimensional barcode printed, captured fingerprints with the database at **(para 0029 and 0045)**.

Other Cited Prior art

The other cited prior art relevant to applicant's disclosure but not relied are (US 7494060), (US 20030085274), (US 20010045463) and NPL Fingerprint-based Forensics identify Argentina's Desaparecidos. IEEE 0272-1716/00 pages 7-10.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JAYESH PATEL whose telephone number is (571)270-1227. The examiner can normally be reached on 5-4-9.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Samir Ahmed can be reached on 571-272-7413. The fax phone

number for the organization where this application or proceeding is assigned is

571-273-8300.

Information regarding the status of an application may be obtained from

the Patent Application Information Retrieval (PAIR) system. Status information

for published applications may be obtained from either Private PAIR or Public

PAIR. Status information for unpublished applications is available through

Private PAIR only. For more information about the PAIR system, see http://pair-

direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-

free). If you would like assistance from a USPTO Customer Service

Representative or access to the automated information system, call 800-786-

9199 (IN USA OR CANADA) or 571-272-1000.

12/4/2009
/JAYESH PATEL/
Examiner, Art Unit 2624

/Samir A. Ahmed/
Supervisory Patent Examiner, Art Unit 2624